



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/991,036

11/20/2001

Richard Falk

EFIM0289

3634

31408 7590 03/21/2008
LAW OFFICE OF JAMES TROSINO
92 NATOMA STREET, SUITE 211
SAN FRANCISCO, CA 94105

EXAMINER

THOMPSON, JAMES A

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

03/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/991,036	Applicant(s) FALK, RICHARD	
	Examiner JAMES A. THOMPSON	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2007 and 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 17-19, 23-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 17-19, 23-26 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/22/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments filed 17 January 2008 have been fully considered but they are not persuasive.

Applicant argues that Ringness (USPN 6,456,395) does not teach anything regarding Postscript *patterns*.

Examiner replies that Ringness does teach Postscript patterns. Column 7, lines 18-23 and column 9, lines 19-27 of Ringness describe adding of Postscript code to the Postscript stream which defines the "key color" that is to be used for a particular partition of the document page, such as further shown in figure 2 of Ringness. Each object is defined by its shape, location, and key color (among other attributes). The object with a key color, or spot color, particularly defined in the Postscript code constitutes a Postscript pattern. While this may not be the same interpretation Applicant applies to "Postscript pattern" Applicant is respectfully reminded that claims are given their broadest reasonable interpretation consistent with the specification (see MPEP § 2111), and limitations from the specification are not imported into the claims (see MPEP § 2111.01(II)).

Furthermore, even if *arguendo* Ringness does not teach Postscript patterns, the use of Postscript patterns is not an invention of Applicant and the use of Postscript patterns would have been an obvious modification to Ringness, assuming *arguendo* that Postscript patterns were not taught. For the sake of setting forth a clear issue of rejection (see MPEP § 706.07), Examiner not only maintains the prior art rejections set forth in the previous office action, mailed 17 August 2007, but also provides an additional set of prior art rejections based on an additional prior art reference.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

Art Unit: 2625

international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 17-18 and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Ringness (US Patent 6.456.395 B1).

Regarding claims 1, 17 and 24: Ringness discloses providing a database comprising a spot color name (column 7, lines 30-35 of Ringness – *set of spot colors stored and used by DTP program*) associated with corresponding image data (column 3, lines 35-40 of Ringness – *colorimetric values of colors to be printed*); receiving a print job comprising page description language ("PDL") code (*Encapsulated Postscript ("EPS") is a form of page description language*) that includes a reference to the spot color name (column 6, lines 57-67 of Ringness – *spot color names and definitions located in DSC comments of the header portion of the EPS file*); identifying the spot color name in the PDL code (column 7, lines 12-23 of Ringness – *spot color names in DSC comments compared with spot color names used by DTP program*); retrieving from the database the corresponding image data associated with the identified spot color name (column 8, lines 15-35 of Ringness – *if spot color names match, colorimetric values retrieved; if not, similar values determined and retrieved*); adding PDL code to the print job for painting the retrieved image data as a PostScript pattern in the print job (column 7, lines 18-23 and column 9, lines 19-27 of Ringness – *color operators of Postscript code redefined by code inserted in the Postscript stream*); executing the PDL code in the print job; and painting the retrieved image data as a PostScript pattern in the print job (figure 6(616) and column 14, lines 33-43 of Ringness – *modified EPS code executed by printer, thus painting the retrieved image data*).

Further regarding claim 24: Ringness discloses performing the method of claim 1 using a program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer (column 5, lines 44-54 of Ringness).

Further regarding claim 17: The database and modules comprising the apparatus of claim 17 correspond to the physically embodied portions of stored data and program codes executed by the computer in claim 24.

Regarding claims 2, 18 and 25: Ringness discloses that the image data are definable by a user (column 5, line 67 to column 6, line 11 and column 6, lines 20-30 of Ringness – *EPS files generated by user using desktop publishing software*).

Art Unit: 2625

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 3, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ringness (US Patent 6,456,395 B1) in view of Gass (US Patent 5,822,503).**

Regarding claims 3, 19 and 26: Ringness discloses providing a user interface (figure 1(40,42, 47) and column 11, lines 38-48 of Ringness) that allows a user to create, modify and/or delete the image data and the spot color name (column 6, lines 54-60 of Ringness – *since user creates and modifies EPS file, user creates, modifies and/or deletes image data and spot color names*).

Ringness does not disclose expressly providing a user interface that allows a user to create, modify, and/or delete the spot color pattern names *in the database*.

Gass discloses providing a user interface (figure 4 of Gass) that allows a user to create, modify, and/or delete the spot color pattern names in the database (column 6, lines 45-50 of Gass).

Ringness is combinable with Gass because they are from the same field of endeavor, namely processing and manipulation of color in digital page description language files. At the time of the invention, it would have been obvious to a person of ordinary skill in the art provide in said user interface means by which a user may create, modify, and/or delete the spot color pattern names *in the database*, as taught by Gass. The motivation for doing so would have been to allow a user to be able to both define specific desired colors and patterns (column 6, lines 9-19 of Gass) and, with the knowledge of the minimum amount of separations required, print with as few separations as needed, thus reducing the overall printing cost (column 6, lines 25-31 of Gass). Therefore, it would have been obvious to combine Gass with Ringness to obtain the invention as specified in claims 3, 19 and 26.

Art Unit: 2625

6. Claims 7, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ringness (US Patent 6.456.395 B1) in view of Hains (US Patent 6,262,811 B1).

Regarding claims 7, 23 and 30: Ringness discloses adding additional PDL code to the print job (column 7, lines 20-23 and column 10, lines 48-52 of Ringness – *prologue and epilogue code added to print job data stream*) to perform other tasks (column 12, lines 41-51 of Ringness).

Ringness does not disclose expressly that said other tasks include mirroring or four-way mirroring to prevent stitches from appearing in the printed output.

Hains discloses mirroring (column 3, lines 35-39 of Hains) or four-way mirror of halftone dot patterns (figure 8 and column 3, lines 39-46 of Hains). Using mirroring or four-way mirroring of halftone dot patterns naturally prevent printing artifacts such as stitching.

Ringness is combinable with Hains because they are from similar problem solving areas, namely how to best represent halftone patterns in printing to achieve more pleasing and accurate image representations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use mirroring or four-way mirroring, as taught by Hains, for the image processing taught by Ringness. Since the digital image data processing taught by Ringness is performed by injecting page description language code, then the mirroring or four-way mirroring process performed by Hains would be performed by adding additional page description language code. Therefore, it would have been obvious to combine Hains with Ringness to obtain the invention as specified in claims 7, 23 and 30.

7. Claims 1-2, 17-18 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ringness (US Patent 6.456.395 B1) in view of Harrington (USPN 5,701,401).

Regarding claims 1, 17 and 24: Ringness discloses providing a database comprising a spot color name (column 7, lines 30-35 of Ringness – *set of spot colors stored and used by DTP program*) associated with corresponding image data (column 3, lines 35-40 of Ringness – *colorimetric values of colors to be printed*); receiving a print job comprising page description language ("PDL") code (*Encapsulated Postscript ("EPS") is a form of page description language*) that includes a reference to the spot color name (column 6, lines 57-67 of Ringness – *spot color names and definitions located in DSC comments of the header portion of the EPS file*); identifying the spot color name in the PDL code (column 7, lines 12-23 of Ringness – *spot color*

Art Unit: 2625

names in DSC comments compared with spot color names used by DTP program); retrieving from the database the corresponding image data associated with the identified spot color name (column 8, lines 15-35 of Ringness – *if spot color names match, colorimetric values retrieved; if not, similar values determined and retrieved*); adding PDL code to the print job for painting the retrieved image data as PostScript code in the print job (column 7, lines 18-23 and column 9, lines 19-27 of Ringness – *color operators of Postscript code redefined by code inserted in the Postscript stream*); executing the PDL code in the print job; and painting the retrieved image data as PostScript code in the print job (figure 6(616) and column 14, lines 33-43 of Ringness – *modified EPS code executed by printer, thus painting the retrieved image data*).

It is assumed *arguendo* in this section that the Postscript code taught by Ringness does not constitute a Postscript pattern. However, Harrington teaches using Postscript patterns for the various colors (column 7, line 63 to column 8, line 10 of Harrington).

Ringness and Harrington are combinable because they are from the same field of endeavor, namely the use of PDL code to define and print digital document images. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a Postscript pattern as the Postscript code that is painted in the print job. The suggestion for doing so would have been that, in Harrington, Postscript patterns are used to define and render particular shapes with particular colors (column 7, line 63 to page 8, line 10 of Harrington), such as is also done in Ringness (figure 2; column 7, lines 18-23; and column 9, lines 19-27 of Ringness). Therefore, it would have been obvious to combine Harrington with Ringness to obtain the invention as specified in claims 1, 17 and 24.

Further regarding claim 24: Ringness discloses performing the method of claim 1 using a program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer (column 5, lines 44-54 of Ringness).

Further regarding claim 17: The database and modules comprising the apparatus of claim 17 correspond to the physically embodied portions of stored data and program codes executed by the computer in claim 24.

Regarding claims 2, 18 and 25: Ringness discloses that the image data are definable by a user (column 5, line 67 to column 6, line 11 and column 6, lines 20-30 of Ringness – *EPS files generated by user using desktop publishing software*).

Art Unit: 2625

8. Claims 3, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ringness (US Patent 6.456.395 B1) in view of Harrington (USPN 5,701,401) and Gass (US Patent 5,822,503).

Regarding claims 3, 19 and 26: Ringness discloses providing a user interface (figure 1(40,42, 47) and column 11, lines 38-48 of Ringness) that allows a user to create, modify and/or delete the image data and the spot color name (column 6, lines 54-60 of Ringness – *since user creates and modifies EPS file, user creates, modifies and/or deletes image data and spot color names*).

Ringness in view of Harrington does not disclose expressly providing a user interface that allows a user to create, modify, and/or delete the spot color pattern names *in the database*.

Gass discloses providing a user interface (figure 4 of Gass) that allows a user to create, modify, and/or delete the spot color pattern names in the database (column 6, lines 45-50 of Gass).

Ringness in view of Harrington is combinable with Gass because they are from the same field of endeavor, namely processing and manipulation of color in digital page description language files. At the time of the invention, it would have been obvious to a person of ordinary skill in the art provide in said user interface means by which a user may create, modify, and/or delete the spot color pattern names *in the database*, as taught by Gass. The motivation for doing so would have been to allow a user to be able to both define specific desired colors and patterns (column 6, lines 9-19 of Gass) and, with the knowledge of the minimum amount of separations required, print with as few separations as needed, thus reducing the overall printing cost (column 6, lines 25-31 of Gass). Therefore, it would have been obvious to combine Gass with Ringness in view of Harrington to obtain the invention as specified in claims 3, 19 and 26.

9. Claims 7, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ringness (US Patent 6.456.395 B1) in view of Harrington (USPN 5,701,401) and Hains (US Patent 6,262,811 B1).

Regarding claims 7, 23 and 30: Ringness discloses adding additional PDL code to the print job (column 7, lines 20-23 and column 10, lines 48-52 of Ringness – *prologue and epilogue code added to print job data stream*) to perform other tasks (column 12, lines 41-51 of Ringness).

Ringness in view of Harrington does not disclose expressly that said other tasks include mirroring or four-way mirroring to prevent stitches from appearing in the printed output.

Art Unit: 2625

Hains discloses mirroring (column 3, lines 35-39 of Hains) or four-way mirror of halftone dot patterns (figure 8 and column 3, lines 39-46 of Hains). Using mirroring or four-way mirroring of halftone dot patterns naturally prevent printing artifacts such as stitching.

Ringness in view of Harrington is combinable with Hains because they are from similar problem solving areas, namely how to best represent halftone patterns in printing to achieve more pleasing and accurate image representations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use mirroring or four-way mirroring, as taught by Hains, for the image processing taught by Ringness. Since the digital image data processing taught by Ringness is performed by injecting page description language code, then the mirroring or four-way mirroring process performed by Hains would be performed by adding additional page description language code. Therefore, it would have been obvious to combine Hains with Ringness in view of Harrington to obtain the invention as specified in claims 7, 23 and 30.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. THOMPSON whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A Thompson/
Examiner, Art Unit 2625

15 March 2008